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ABSTRACT

This paper describes two collaborative projects conducted with graduate students from Texas A&M University-Commerce and West Texas A&M University during the fall semesters of 1997 and 1998. The instructors, with a history of personal collaboration both in person and online, designed an activity to provide their graduate students with the opportunity to participate in organized collaborative activities directly related to content in their courses. A year later, they again included a joint collaborative activity as part of their courses. Based on student input and instructor observation, emphasis shifted from product over process during the first year, to process over product during the second. These two models are described, including lessons learned, and a brief statement about future directions. (Author/AEF)



Online Collaboration: Two Models

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Abstract: This paper presents a description of two collaborative projects conducted with graduate students from two different universities, during two consecutive fall semesters. The instructors, with a history of personal collaboration both in person and online, designed an activity to provide their graduate students with the opportunity to participate in organized collaborative activities directly related to content in their courses. A year later, they again included a joint collaborative activity as part of their courses. Based on student input and instructor observation, emphasis shifted from product over process during the first year, to process over product during the second. These two models are described, including lessons learned, and a brief statement about future directions.

Introduction

Distributed learning environments are a product of the information society, as depicted in what Howard (1994) calls the "third wave school." The third wave school is described as one that provides access to geographically distributed resources (Harasim, Hiltz, Teles, & Turoff, 1995), employs instructors who serve as facilitators or guides to student learning (Doyle, 1994; Harasim et al., 1995; Keedy, 1995; Patten, 1990), and places an emphasis on problem solving and thinking skills (Batson & Bass, 1996; Boyer & Semrau, 1995). The online learning environment uniquely supports the third wave learning environment through the facilitation of collaborative learning activities. In the online collaborative environment students have access to geographically distributed resources, especially "people resources" who actually define the process, while the process structure is provided through instructor facilitation. The collaborative process itself promotes problem solving and thinking skills, thus driving the process. Recognizing the importance of participating in online collaborative activities, and of providing opportunities for students to do the same, many instructors at various levels are seeking out and joining in such activities in many formats. Online projects are numerous, and teachers can find a variety of programs that provide collaborative environments in which to interact with others.

The Setting

During the fall semesters of 1997 and 1998, graduate classes at Texas A&M University-Commerce (in East Texas), and at West Texas A&M University (in the Texas Panhandle), have participated in collaborative projects to enhance student understanding of course objectives, and to examine and/or develop procedures to facilitate the collaborative process. Students were enrolled in either ETEC 625 (Computer Research Applications), or EDT 5520 (The Internet: Organization, Design, and Resource Utilization). In both courses they studied Internet concepts, although the focus differed somewhat. Both courses, though, included units related to online ethics and web evaluation, and these have formed the basis for the collaborative projects. The first year's topic was online ethics, and the results are available online, on the Ethics Symposium (1997) pages. The second year's project had a dual focus—online collaboration and web page evaluation. During the CSC



(Collaboratively Studying Collaboration) Project, students evaluated web pages, while examining the collaborative process in which they were involved. From these two projects, two collaborative models, related partly to the approach, organization, and direction of the collaborative processes, have evolved, and these are described below, as the projects and procedures from both semesters are explained and compared.

With a ten-year history of collaboration, first as graduate students, and then as authors and presenters for publications and conferences, the two instructors were well accustomed to working together online. When they discovered that they were teaching similar courses at their respective universities, it seemed natural to extend their collaboration to include their students, providing an opportunity for their graduate students to gain experience in this arena. Issues to be considered included access, content, scheduling, grouping, and process facilitation. Ongoing collaboration between the instructors was essential, and there was often daily communication for planning, discussion, or ongoing informal-evaluation purposes. Frequent instructor negotiation occurred, as the two strove to find a middle ground that would best meet the needs of their respective students.

Year One — Product Over Process

Collaborative activities began with the instructors, with the first consideration being course content, as the instructors exchanged syllabi. In each class, a unit on ethics was scheduled after the middle of the semester, and this was chosen as the content for the collaborative effort, partly for its timing (students in each class would know each other and would be comfortable with the technology), but primarily because the topic was so important. Next, decisions about grouping the students had to be made. For the project, the area of ethics was broadly defined, and was divided into four areas—copyright, intellectual property, netiquette, and fair use. The instructors divided the students among the groups, with 12 to 15 students in each, and with representatives from each university in each group.

Because the Commerce students had more technical experiences (mist students had already taken at least two other ETEC courses), the instructors decided that the group leaders should come from the Commerce group, and the leaders were chosen based on their expertise in working with people as well as with technology. Each group also had a site coordinator from WT, and this individual was to work with the group leader as somewhat of a co-facilitator. The WT students were generally taking EDT 5520 as the first course in the master's program, and many had little if any previous experience with some of the technologies we were using.

During the first week, students exchanged messages and met for an online chat on WebBoard, the online chat and conferencing system used by the Commerce class. The WT students were somewhat hesitant at first, because the chat environment was different from the one they used, but each of the four groups met online during the first week, and in the next week's assignment message, the Commerce instructor said,

Great job with the group meetings for the 4 different collaborative 'big groups'. I was able to attend all 4 sessions, and really appreciate the way y'all welcomed the WT folks. Interesting - if I were just 'watching and listening' and didn't know who's who, I wouldn't be able to separate the groups. :-) That speaks well of y'all, because you modeled online discussion techniques, and obviously made our guests feel right at home. :-)

The instructors continued to play a visible spectator role, and were available for consultation with groups, as needed. The focus of the collaborative activity was exploration of issues related to each group's topic, with the final product to be a set of web pages about computer-related (especially Internet-related) ethical issues. Specific guidelines were provided, to increase the probability that the pages would look like one cohesive project, although there was an attempt to allow for some individuality. The groups were to decide how to function -- with the option of breaking up into smaller groups within each topic, although all would have to work together on the final product. There was much skepticism at first, as students could not imagine how this would ever work—and amazement by some of these same students, when they were working with their groups and when they saw their final product. In a reflection, one student commented,

I really enjoyed this assignment. I definitely was apprehensive at first, but had no difficulties once we began. I guess I just needed a little shove to get going! Thanks for the chance to get to know the ____ group!



As students looked back on their experiences, they noted aspects of the process that frustrated and that interested them. One student said,:

The aspect of the process which was frustrating to me was trying to collaborate in a large group at the beginning..... The aspect of the process which interested me was realizing that sometimes a group is too large to be productive and warrants breaking into small groups to be more effective.... I will approach future collaborative learning opportunities by first of all making sure the group is small enough so everyone's views can be heard.

The group size issue was especially problematic when trying to get an entire group online for a WebBoard chat at one time. The java-based chat program did not seem to work well with large numbers of participants, and some home computers did not appear to work well with the interface. A few students had experiences similar to the following:

I spent a part of the time frustrated because I couldn't seem to become involved with the discussions. One night there were technical problems and only one other person made it online, two other sessions one or two people dominated and seemed to ignore everyone else, and one night there were too many participants. I did plenty of research and was comfortable communicating the results with one or two people.

Despite any frustrations or other problems, the project was a success, and it amazed everyone concerned when it was published on the web. As one student said,

It is hard to believe that so much was accomplished by people who were hundreds of miles apart. The final result was a concise but informative site that thoroughly covered the ethics dilemmas presented by this new technology. I am very impressed with the design as well as the content of the site. The graphics and interactivity were astounding. I think everyone should be proud.

And proud they were. This was exciting for the instructors, especially as some of the initial doubters were talking about how they would like to use similar collaborative processes with their k12 (and higher education) colleagues and students. One student wrote:

The process of our symposium has also given me a challenge of involving teachers at my school in a similar experience in one of future staff developments and I will encourage then to try to do something similar with their students so that we can all help to promote honest people as we travel the information superhighway!

At the end of the project, the instructors took a look back at what worked and what could have been improved, in order to make the needed changes for future collaborative activities. Based on their observations, and student input, the following areas were identified for modification in future endeavors. Students felt rushed, and they suggested that it would be helpful to have more time. They also almost unanimously agreed that the groups needed to be smaller. The instructors had worked with the groups as requested, but were realizing that their involvement sometimes stifled or even interfered with the collaborative processes, as some students began to rely on coming to them, rather than on working out problems and other situations as part of the group process (thus building skills for use later, after the class was over). These concerns were recorded for consideration in future projects.

The emphasis had been on product over process -- where the main goal of the project was to research, create, and produce the Ethics Symposium web pages. How would this have worked if the emphasis had been reversed? That was the premise for the next year's project.

Year Two — Process Over Product

The following year's project, CSC (Collaboratively Studying Collaboration), grew out of a desire to help our teacher/graduate students to develop and understand the collaborative processes that they might use with other educators, as well as with their own and other students. Areas of concern from the Ethics Symposium project were also considered. In that project, there had been a feeling of being rushed from the very beginning, so the instructors decided to start earlier, and to give the students from the two universities a chance to get to



know each other. Students had complained about the large size of the groups (4 groups with 12-15 in each), so the new project had 6 groups, with 6 or 7 people in each. The instructors had been concerned that some students were circumventing the collaborative process by coming to them, and they determined to provide a collaborative group structure that would facilitate group processes. In fact, as they developed their model, they were so focused on the collaborative process, that it was a while into the planning stage before they began looking for a product on which the students could collaborate. This year, the process was definitely going to drive the product. As the syllabi were again exchanged, a common topic, web evaluation, was found, and it became the product about which the groups from the two classes would collaborate.

The week before beginning the project, to establish a common discussion ground, the graduate students at each school read and discussed 'Communication and Trust in Global Virtual Teams' (Jarvenpaa & Leidner, 1998). During the first week of the project, when the mixed groups were formed, students met in chat rooms or via e-mail to discuss concepts from the article, and how they felt these would be helpful in the collaborative process. Throughout the semester, the collaborative process driving the project was facilitated by the course instructors through the project structure. A list of individual responsibilities and roles was distributed, and each group was responsible for meeting and deciding who would do what. There was freedom to create an additional position (and define its meaning), and two of the larger groups elected to do so. Each group was independent, and all members shared responsibility for all others in the same group. The instructors watched from a distance, and had many a discussion about whether they should intercede. However, since the primary goal was to be learn to interact successfully in collaborative online groups, the importance of a 'hands off' attitude seemed essential, to promote the development of these skills. To help the groups focus without being influenced by others, each group had an assigned conference room on the Commerce WebBoard, and was able to see its own room only. Since the previous fall, WebBoard had been upgraded, and it was now on a faster server, and some of the problems were now as severe. Technical problems did still crop up. Although everyone had been required to use WebBoard chat when discussing the Jarvenpaa & Leidner (1998) article, they were told that how they met for their collaborative activities was up to them, as long as their meetings were documented.

This included specific group assignments and processes to guide the collaborative process. For any group activity, there must be a content around which the group activities will center. For the CSC project, the content was web evaluation, and each group developed its own set of criteria (based on research they conducted as part of the project), and then evaluated web pages based on that criteria. Students actually defined the process through their interactions in the development of web evaluation criteria. The process was driven by means of the problem solving and critical thinking activities that led to the development of a collaborative website, where each group had an individual page. Some students adapted quickly to the group experience, whereas others discovered that they might have to change the way they do things. One said,

The technical aspects frustrated me and trying to get together. It showed me my writing skills need to be improved on. I also missed some of the instructions. It was there, I just didn't see it. I need more of a check list.

In answer to a question about what might be done differently before approaching other collaborative activities, this same student said,

I will make my own check list so I will not let anyone down.

This collaborative attitude is what the instructors were looking for, and was repeated, in essence, by others. A student summed up the CSC collaborative experience:

The project took much careful thought and planning. It was worthwhile, both in content and collaboration. Content will continue to be of use to me and the good collaborative experience will give me courage to attempt this again, knowing that this truly can work well! I am realistic enough to know that things don't always work as well, as it did with this group, but perhaps the good cooperative experience will give me an insight to help guide a group to a successful collaborative endeavor.

This is what the instructors had in mind, while evaluating the Ethics Symposium project, and while planning the CSC project. Statements like this let us know that the project was a success.



Lessons Learned

A collaborative project involves two distinct components, and the amount of emphasis given each may define the entire project. With the emphasis on product during the Ethics Symposium, the instructors were available to work with, and consult about, ongoing collaborative concerns. This however, resulted in some students not internalizing (or fully participating in) the collaborative process. On the other hand, with the emphasis on process during the CSC project, some students were disappointed in their group's final product. A group facilitator, when viewing the group's finished page, stated,

Now that I am able to see the other groups, I'm disappointed. I feel I failed as facilitator because I did not give needed input at the end as far as the design of the page.

This person's group identification is strong -- assuming responsibility despite the fact that the group's designers were in charge of creating the web page. Interestingly, members of other groups did not agree with the page evaluation, and several rated that same page positively.

Based on student input, various components were changed after the first semester, and more will be changed based on feedback from the CSC project. These included adding time, and reducing group size. We also added more structure, but students wanted still more, so we need to revisit this and see how to get them to accept much of the responsibility. Despite the added time during the second year, we still need to find a way to get the groups together earlier for some socialization before beginning the project, according to some of the student feedback. They felt it would have been easier to begin their collaborative activities if they had already met and communicated on non-project activities. During the CSC project, the students from WT worked in groups that had already been established in their class, whereas the students in Commerce formed new groups. This mixture of groups appeared to be problematic for some, and the instructors need to address this issue before beginning the next project. Ideally, it would be more helpful if both classes had the same number of students, but that is just a pipe-dream.

The Future

Year Three is ahead of us, and is filled with questions. What will be the emphasis -- product, process, or something entirely different? What will be the structure, and how much will there be? What about the content? How will this be decided? A recurring activity and theme throughout the projects had been reflection, immediate as well as delayed. Perhaps one way to answer these questions is to pose them to the people with the most experience -- those who have participate in Year One and Year Two. Requesting that they complete a delayed reflection form, after they have had time to move on from the experience and then to look back may be a very appropriate method of obtaining input for upcoming collaborative ventures.

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